DOCUMENT RESUME

ED 156 778 UD 018 414

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TITLE Teacher Judgment of Student Self-Concept.
PUB DATE 20 Jun 78
NOTE 22p.; Paper presented at the Canadian School Trustee's Association Congress on Education (1st, Toronto, Canada, June 20, 1978)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Black Students; Elementary Education; *Elementary School Students; *Self Concept; Self Concept Tests; *Student Behavior; *Teacher Role
IDENTIFIERS *Devereux Elementary School Behavior Rating Scale

ABSTRACT

Teacher judgments of student self concepts were compared with the students' obtained self concept scores, and the teachers' rating of the classroom behavior of the students. The relationships between the three sets of data were examined via canonical correlations. The instruments used were the Self Observation Scale and the Devereux Elementary School Behavior Rating Scale. The subjects were 56 black, inner city elementary students with 18 teachers participating in the ratings. The results showed the teachers were fairly close in their predictions of the students' self concepts but overestimated the self security scores. In relating the teacher predictions of student self concept, teacher ratings of classroom behavior, and student self concepts it was found that the self security aspect of self concept was consistently identified with sociocentric disruptive behavior as variables possessing the highest weights in the canonical variates. Teacher prediction of student self concept was related to student self concept via self security; teacher rating of disruptive classroom behavior was related to both student self concepts and teacher prediction of student self concepts via self security. The conclusion was that teachers must attend to student anxiety in the classroom to reduce disruptive behavior. (Author)

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ED156778

TEACHER JUDGMENT OF STUDENT SELF-CONCEPT

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Paper presented at the Canadian School Trustees' Association First Congress On Education in Toronto, Ontario, Canada, June 20, 1978.

Printed in U.S.A.

UD018414

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INTRODUCTION

How students feel about themselves has long been a concern of schools. Ralph Tyler, in his classic book Basic Principles of Curriculum and Instruction (1947), for example, listed student concerns as one major source of objectives. Interest has developed more intensely since the publication of Krathwohl, et al, in 1964, of the Taxonomy of Educational Objectives: Handbook II: Affective Domain. In the last decade, this interest has greatly affected teaching practice, with the publication of books such as Simon, et al, Values Clarification, and books with titles such as 100 Ways to Increase Student Self-Concept.

The tacit assumption in all such approaches is that teachers possess the techniques to raise student self-concepts. Within this assumption is the further assumption that teachers have the ability to identify students with low self-concepts; without this ability, the special skills to raise student self-concepts would be rootless. It is, for example, illogical to suppose that a teacher would initiate a program to improve a student's poor self-concept if the student's self-concept initially was very high.

As far as is known to the present authors, however, the assumption that teachers can accurately assess student self-concept has never been tested. Furthermore, if teachers cannot accurately assess self-concept, what student characteristics affect the teacher's judgment has not been determined. The present study was undertaken to study these two areas. Specifically, the study 1. determined whether a sample of elementary school teachers could accurately judge the level of self-concept of students they were teaching,

and 2. examined teacher judgments of overt student classroom behavior to determine the relationship of these behaviors to the teacher judgment of student self-concept.

Overview of PEECC

The data for this paper was collected during a two year project titled "Planning Education Environments for Cleveland Children" (PEECC) which was funded by the Gund Foundation. PEECC was a four year project in the Cleveland Public Schools (Ohio) that featured two faculties assuming the task of planning curricular change for their respective schools. Both schools selected two major goals: to increase reading achievement scores and to improve the self-concepts of their students. The PEECC project was an educational program that facilitated a process whereby a school building's staff identified the educational and organizational needs of their building and developed curriculum and organization changes to meet those needs. From those deliberations came objectives to affect change in the self-concepts of students concommitant with change on cognitive variables in reading achievement.

Two professors from Case Western Reserve University (Jorgenson and Hollinger) taught "courses" in the two schools. The courses were constructed from scratch in cooperation with teachers in the affected schools - University curriculum courses were <u>not</u> transferred to the public school buildings. The teachers received three hours of graduate credit each semester for taking the courses. A very detailed accounting of the planning and implementation processes involved in the courses was presented in Jorgenson (1978) and Hollinger (1978).

The project had one year of planning, two years of development and

refinement, and is now in the diffusion stage within the school system. The two schools involved were all black inner city schools.

The curriculum was revised to somewhat resemble the so-called Wisconsin plan. The children were grouped by ability for reading and social studies instruction for one-half the day and then sent to "homeroom" (heterogeneous grouping) for other subjects. The self-concept evaluation concluded there were no real tangible gains (Kennedy, 1977; Kennedy and Lorish, 1978) and there were modest reading achievement gains. An overall conclusion was that teachers can modify curriculum with about the same results as those who promote curriculum revision by specialists.

METHOD

Instruments

The Self Observation Scale

The instrument chosen for measuring self-concept was the Self Observation Scale from the National Testing Service in Durham, N.C. There were two forms: primary (first, second, and third grades) and intermediate (fourth, fifth and sixth grades). Scoring was included in the purchasing price. The scores were T scores with a mean of 50 and a standard deviation of 10.

The primary form had four subscales:

1. self acceptance - high scoring children view themselves as positive, happy, important, and competent. Low scoring children see themselves as inadequate, unsuccessful, and undesirable.

2. social maturity - high scorers see themselves as independent, persistent, and sensitive to other people's needs while low scorers see themselves as quitors and loners, and uncertain in social interactions.

3. school affiliation - high scorers view school as a positive influence in their lives, they enjoy it while low scorers view school as an unhappy place and do not see school as important in their lives.

4. self security - high scorers report low anxiety and emotional stability while low scorers are anxious and uncertain.

The intermediate form had seven subscales, the same four subscales as the primary form plus three more:

5. social confidence - high scorers made friends easily, feel confident while low scorers have difficulty in making friends, etc.

6. teacher affiliation - high scorers like their teachers while low scorers do not like their teachers.

7. peer affiliation - children high on this scale see themselves approved of by their peers and like to be with other children while low scorers see other children as unfriendly and have few friends.

The Devereux Scale

The teachers completed a Devereux Elementary School Behavior Rating Scale (DESB; Spivack & Swift, 1966, 1967, 1973) for each subject in the study in their classes. There are 11 behavior factors, plus 3 specific behavior items not included in the factors, that are derived from the DESB. Each factor consists of from 3 to 5 behavior items on which students are rated by the teacher. Each factor taps "a common dimension of classroom behavior that is relevant to academic achievement or adjustment" (Spivack & Swift, 1967, p. 8). The behavior factors measured by the DESB, along with brief descriptions of typical behaviors within the factors (Spivack & Swift, 1973), include:

> classroom disturbance (active, social /though inappropriate/, and disruptive; behaviors which, at high levels, cause the teacher to feel the need to impose controls and structure);

> impatience (inappropriate drive for completing work with a disregard for understanding directions and/or neatness, and a resistance to going over work once it is considered by the the child to be finished); disrespect-defiance (rejection of the teacher, classroom rules, and/or subject matter); external blame (the child's tendency to blame external circumstances and the teacher for failure, with the implication that the child not only sees external sources of frustration but is unaware of his own behavior as a determining issue); achievement anxiety (overconcern with meeting achievement demands, and an accompanying element of upset over possible inability to meet these expectations); external reliance (overdependence upon external directions and structure and inability to make independent decisions); comprehension (understanding and application of material in day-to-day activities); inattentive and withdrawn inattention or loss of contact with what is going on in class, and perhaps daydreaming); irrelevant-responsiveness (response in class which is irrelevant, and interrupts or detracts from the topic being discussed by the class or teacher); creative-initiative (self-initiated, positive involvement in the classroom); and closeness to the teacher (desire for closeness to and friendliness with the teacher), /p. 78/

The three additional items not included in the above behaviors are the following: unable to change from one task to another, likely to quit or give up, and slow to complete work.

Dimensions of teacher ratings of classroom behavior (N = 14) were thus derived from the DESB. There were 11 measures related to behavior factors; a subject's score on each factor was the sum of the raw scores on each behavior item within that factor. The score for each of the nonfactor items was the single rating made for that item by the classroom teacher.

Subjects

The students were drawn from intact classroom units in the second through the sixth grade. Special classrooms, libraries, kindergarten and other components of the schools' curricula were not tested. Twenty-one classrooms at School A had five boys and five girls drawn at random. All of the students tested were black. Four students (two boys, two girls) from the groups of ten were randomly chosen as subjects for the teachers

to rate with the Devereux.

Procedure

All of the students were tested in intact classroom groupings. The chosen students in grades 2 and 3 were called from their regular classes and taken to a room set aside for testing. They were placed at desks that were far enough apart so that no student could see the responses of another student. The directions were read to them twice. Then each question was read aloud twice to minimize any possible reading difficulties. The fourth, fifth, and sixth grades were tested in the intact classroom unit. Thus, the primary groups were tested in groups of ten or less, while the intermediate groups were tested in groups of 20 or more. It was difficult to eliminate a "group answer" effect completely. For example, the question, "this school is like a jail" would frequently cause hooting and yells of yes, etc. The testers read the questions aloud and kept up a good pace to keep interaction time to a minimum. General impressions of the test administrators were that the students did not mind the test questions and cooperated willingly. The assessment team believed the data valid.

The teachers filled out the SOS answer sheets for each of the 10 children chosen randomly from their classrooms. The teacher "guess" was done after school during the same week the children took the SOS. The teachers answered each question as they thought their students would.

The teachers also filled out the Devereux rating sheet for the four randomly chosen students after school, as they did with the SOS (the teachers did begin to protest the amount of data collection!).

The teachers rated the children with the Devereux in October and April, the students took the SOS in October and April, and the teachers tried to predict the students' April SOS scores in April as well. The teachers did not predict SOS scores in October.

RESULTS

A full description of the self-concept profiles of the school children in the project were presented in Kennedy and Lorish (1978). Since these analyses touch upon a different subject, a few of the tables will be presented here for background information. Tables will be used through this section to reduce the prose. Only summaries of the results will be stated.

Tables 1 and 2 present the pretest and posttest self-concept scores for the children who completed the SOS in the school of interest. The data clearly indicated that the children were in the "average" range of self-concept. The shape of the profile was similar to the normed profile for a black subculture. On the SOS the black subculture profile and a profile of low achievement readers was similar. For this sample, however, the profiles of black excellent readers (while substantially higher than the profiles of black low readers) was the shape of the black subculture profile. Thus, black high achievement readers developed a profile shape that was similar to the normed profile shape for poor readers. The implications of these results were taken to be that the effects of culture may mask or overpower the effects of school achievement on the self-concept profiles of elementary school children (as measured by the SOS).

The Devereux had 11 subscales, the SOS had four subscales (common to both the primary and intermediate forms), and the teachers also had a

set of SOS scores for each child. The authors determined that a data reduction process was in order.

Accordingly, the Devereux was put through a factor analysis. Both the pretest scores and the posttest scores were factor analyzed. The results are displayed in Table 3. Two factors emerged from the analyses. The first factor was believed to be weighted towards those Devereux subscales that rated the students' responses as learners to the teacher - impatience, external reliance, comprehension, and inattentive-withdrawn. The second factor appeared to indicate a close relationship between those Devereux subscales that rated the child's sociocentric disruptive behavior in the classroom - classroom disturbance, impatience, disrespect-defiance, external blame, and irrelevant-responsiveness. The pretest and posttest analyses replicated one another, indicating that the teachers' ratings of the children's classroom behavior remained internally consistent over the course of the school year on the two global dimensions of individualistic response as a learner and sociocentric disruptive behavior in the classroom.

Since the Devereux was originally constructed by a form of factor analysis, it was determined that computing factor scores for the two "super" factors would not be overly helpful. Two cluster scores were computed by simply adding (or subtracting) the appropriate Devereux subscale score that loaded highly on the super factor. The respective subscales are boxed on Table 3. The net result of this process was to produce two scores that represented the original eleven subscale scores.

Table 5 presents the results of relating the teachers' prediction of their students' self-concepts with the obtained self-concept scores of the students. There was a significant canonical variate. Self security was

the SOS subscale that had the highest coefficient on the linear combination to predict obtained student SOS scores from the teachers' estimates of what the students' self-concept scores were, both for the teacher prediction and the student measure. Furthermore, the teachers' estimate of the school affiliation subscale had a moderately high negative coefficient. The means in Table 4 provided some explanation of what was occurring. The teachers overestimated their students' self security scores and slightly underestimated their school affiliation scores. The reader should remember that the analysis in Table 5 is relating the judgments of two judges about a single entity (the student) - the teacher judges the student and the student judges himself. The conclusion from this analysis was that the self security subscale and the school affiliation subscale were important variables in relating the predictions teachers make about student self-concepts and the actual scores that students obtain on the self-concept instrument, thus the canonical variate in Table 5 was labeled a self security-school affiliation relationship. The relative weights of the variables on the canonical variate were able to be compared as they existed because the SOS scores were standardized to T scores in the scoring process.

The analysis displayed in Table 6 was difficult to interpret. Two significant canonical variates were found. The first variate appeared to be a social maturity-school affiliation versus individualistic response as a learner dimension while the second variate was a self security versus sociocentric disruptive behavior in the classroom dimension. Remembering that this analysis contained teacher scores about the student on both sides of the equation, it was concluded that there was a relationship between a teacher's perception of a student's self security (teachers overestimated it) and how the teacher rated sociocentric disruptive classroom behavior of the

student on the Devereux. Also, there was a relationship between a teacher's perception of a child's social maturity and school affiliation and how the teacher rated the child's individualistic responses as a learner to him.

The two canonical correlational analyses discussed up to this point have indicated that there was a relationship between a teacher's prediction of a child's self-concept scores and the child's own report of his self-concept scores along a dimension of self security - school affiliation. Also, there was a self security-school affiliation dimension between a teacher's prediction of a student's self-concept scores and the teacher's rating of the child's individualistic responses as a learner to him in the classroom. Table 7 displays the results of relating the student's self-concept scores to the teacher's rating of his classroom behavior at the end of the year. There was no significant relationship.

However, when the same analysis was run for the pretest data, shown in Table 8, there was a significan canonical variate (at the .1 level only). The canonical variate relating the students' pretest SOS scores with the teachers' pretest ratings of classroom behavior was explained along a self security school affiliation versus teacher rating of sociocentric disruptive behavior in the classroom dimension.

Thus, the data analyses demonstrated a consistent relationship between teacher judgments and student self-concept along a self security-school affiliation versus sociocentric disruptive behavior in the classroom measures. The authors believe the results should be interpreted with caution. The data analyses often gave alternative relationships when various samples were run. The results reported in this paper were from the largest sample that could be put together and while the conclusions are not quite speculative they should be labeled tentative until replications verif, or deny them.

DISCUSSION

The development of the two cluster scores to represent the information contained in the eleven Devereux subscales was rather straightforward. The individualistic response as a learner (to the teacher) cluster was comprised of 4 subscales: impatience, external reliance, comprehension (minus), and inattentive-withdrawn. If the reader refers back to the description of the instruments section of the paper, he will see that the four subscales related to the individual child and the teacher. The sociocentric disruptive behavior in the classroom cluster was comprised of 5 subscales: classroom disturbance, impatience, disrespect-defiance, external blame, and irrelevant-responsiveness. Those five subscales rated how much the child's behavior disrupted the lesson, required imposition of controls and was performed for the whole class. Impatience was found to load highly on both super factors.

The canonical correlation analysis in Table 8 (where the student self-concept scores were related with the teachers' rating of the student) showed that a student's self-concept was related with how a teacher rated him in the classroom. The variables of interest were the self security and school affiliation of the child and the teacher's cluster rating of the child's sociocentric disruptive behavior in the classroom. The self security subscale of the SOS measured the extent of anxiety and emotional stability in the classroom, while the school affiliation subscale measured the extent that school was a happy or unhappy place to be and whether it was or was not an important influence in the child's life. The sociocentric disruptive behavior cluster assessed the extent of the child's behavior that reflected the following: active, social disruptive, teacher feels must impose controls

and structure; inappropriate drive for completing work with disregard for directions and resistance to checking; rejection of teacher and classroom rules and subject matter; blames external circumstances and teacher for failure; disrupts class lessons with irrelevant responses. Thus, the student's level of anxiety and emotional stability, degree of happiness in school, and the school's importance in his life were related to the ratings his teacher gave him for his classroom behavior in the classroom disruptive sense.

Furthermore, this relationship between student self-concept variables and teacher ratings of student behavior was not replicated at the end of the school year. Previous work (Kennedy and Lorish, 1978) showed that the students' self-concepts changed over the course of the school year (self security increased). The canonical analysis contained in Table 5 showed that the teachers' prediction of student self-concept and the students' reported self-concept were related along a dimension of self security and school affiliation. Thus, one could speculate that the teachers' views of students' self-concepts were not changed over the course of the school year.

Table 6 demonstrated that self security and sociocentric disruptive behavior were important variables in relating the teacher's prediction of a student's self-concept and the teacher's rating of classroom behavior.

A pattern emerged from the data analyses that consistently identified teacher predictions of the self security and school affiliation self-concept measures as being related to the teachers' ratings of the students' sociocentric disruptive behavior in the classroom and the students' views of their own self-concept along a self security dimension. The implications for the classroom teacher would be that she should make every effort to

increase the security of the child in her classroom. Jorgenson (1977) discovered that the easier (closer to individual student ability level) the material in the classroom lesson, the less behavioral problems occurred in the classroom. The conclusion drawn from this study was that not only might the difficulty level of the material play a role in classroom behavioral disturbances but that the self security aspects of a student's self-concept may be interacting as well. The teachers, perhaps unconsciously, did relate their judgments of classroom behavior and student self-concept indicating that teaching strategies that reduced anxiety (such as use of learning material at the appropriate difficulty level) might also reduce the amount of disruptive behavior in the classroom.

TABLE 1. Pretest and Post-test mean T scores for grades 4, 5, 6 on the seven subscales of the Self Observation Scale (intermediate form)

	Grade	N	Self Acceptance	Self Security	Social Maturity	Social Confidence	Social Affiliation	Teacher Affiliation	Peer Affiliation
Pretest	4	85	53.1	46.3	42.6	44.8	60.4	52.0	46.7
	5	99	47.2	48.7	44.7	44.4	50.0	42.9	45.8
	6	88	52.7	50.0	49.1	45.5	52.2	47.1	52.1
	4,5,6	272	50.8	48.4	45.5	44.9	54.0	47.1	48.1
Posttest	4	69	46.5	50.8	46.2	47.3	46.7	42.6	47.5
	5	80	48.6	50.7	48.9	48.6	48.0	43.9	50.1
	6	77	52.1	51.1	48.5	46.7	52.8	45.7	52.1
	4,5,6	226	49.1	50.9	47.6	47.6	49.3	44.1	50.0

TABLE 2. Mean T scores for each of the grades and composite for the four subscales on the Self Observation Scale (primary form) for the pretest group and the posttest group

			SOS Subscales			
Test	N	Grade	Self Acceptance	Self Security	Social Maturity	School Affiliation
Pretest	39	2	55.2	54.9	48.1	54.8
	40	3	51.1	52.5	47.8	51.7
	79	2,3	53.1	53.7	48.0	53.2
Posttest	38	2	56.2	58.3	51.1	55.2
	35	3	51.5	51.0	47.4	47.7
	73	2,3	54.0	54.8	49.3	51.6

Table 3. The factor loadings of the eleven Devereux subscales on the two factors for both the pretesting and the posttesting.

PRETEST

Variable	Factor 1	Factor 2
Classroom disturbance	.325	.801
Impatience	.635	.537
Disrespect - defiance	-.001	.947
External blame	.127	.696
Achievement anxiety	.063	.131
External reliance	.771	.153
Comprehension	-.573	-.214
Inattentive - withdrawn	.754	.229
Irrelevant - responsiveness	.277	.750
Creative initiative	-.323	.213
Need closeness to teacher	-.132	-.025

POSTTEST

Classroom disturbance	.458	.645
Impatience	.649	.528
Disrespect - defiance	.121	.927
External blame	.036	.823
Achievement anxiety	.229	.098
External reliance	.826	.111
Comprehension	-.612	-.181
Inattentive - withdrawn	.879	.197
Irrelevant - responsiveness	.462	.771
Creative initiative	-.311	.129
Need closeness to teacher	.086	-.126
	INDIVIDUALISTIC RESPONSE AS A LEARNER	SOCIOCENTRIC DISRUPTIVE BEHAVIOR

Table 4. Means T scores and standard deviations on the four subscales of the SOS for the teacher prediction and the student obtained score, n = 56, and t tests for differences between the means.

	Teacher prediction		Student score		
	$\bar{X}$	s	$\bar{X}$	s	
Self acceptance	53.61	10.93	53.76	8.14	
Self security	54.04	8.71	52.41	9.17	*
Social maturity	49.84	7.49	49.82	8.13	
School affiliation	53.20	8.39	53.82	10.49	

* significant difference at primary level

Table 5. The results of the canonical correlation analysis using the four SOS scores from the posttest teachers' predictions for student answers and the four SOS posttest scores obtained by the students.

Eigenvalue	Canonical Correlation	Wilk's Lambda	X^2	df	p
.139	.373	.787	30.58	16	.015

	Variables	Canonical Variates
teacher prediction posttest	self acceptance	.294
	self security	.739
	social maturity	.040
	school affiliation	-.533
student posttest	self acceptance	.221
	self security	.732
	social maturity	.283
	school affiliation	.073

Table 6. The results of the canonical correlation analysis using the four SOS scores from the teachers' posttest predictions for student self-concept and the two cluster scores from the posttest Devereux rating of the students by the teachers.

Eigenvalue	Canonical Correlation	Wilk's Lambda	X^2	df	p
.394	.628	.507	32.94	8	.001
.163	.404	.837	8.63	3	.035

	Variables	Canonical Variates	
		first	second
teacher prediction posttest	self acceptance	-.050	-.753
	self security	.110	1.214
	social maturity	-.713	-.658
	school affiliation	-.439	.873
teacher rating posttest	individualistic response as a learner	1.031	-1.191
	sociocentric disruptive behavior	-.041	1.574

Table 7. The results of the canonical correlation analysis using the four SOS scores obtained by the students on the posttest and the two cluster scores from the posttest Devereux rating of the students by the teachers.

Eigenvalue	Canonical Correlation	Wilk's Lambda	X^2	df	p	
.073	.271	.921	4.30	8	.829	NS

	Variables	Canonical Variates
student posttest	self acceptance	-.216
	self security	-.273
	social maturity	-.676
	school affiliation	-.044
teacher rating posttest	individualistic response as a learner	-1.03
	sociocentric disruptive behavior	1.43

Table 8. The results of the canonical correlation analysis using the four SOS scores obtained by the students on the pretest and the two cluster scores from the pretest Devereux rating of the students by the teachers.

Eigenvalue	Canonical Correlation	Wilk's Lambda	X^2	df	p
.143	.378	.779	13.12	8	.108

	Variables	Canonical Variates
student pretest	self acceptance	-.422
	self security	.616
	social maturity	.304
	school affiliation	.506
teacher rating pretest	individualistic response as a learner	.225
	sociocentric disruptive behavior	.839

BIBLIOGRAPHY

Hollinger, Constance L. On-site consultation: evolution and resolution of role definition and conflict. Paper presented at American Educational Research Association annual meeting, Toronto, Ontario, Canada, March 1978.

Jorgenson, Gerald W. Relationship of classroom behavior to the accuracy of the match between material difficulty and student ability. Journal of Educational Psychology, 1977, 69, 24-32.

Jorgenson, Gerald W. The use of university courses to support teacher innovation. Paper presented at American Educational Research Association annual meeting, Toronto, Ontario, Canada, March 1978.

Kennedy, William R. Self-concept evaluation of the PEECC project 1976-1977. Evaluation conducted for the Cleveland Public Schools, August 1977.

Kennedy, William R. and Lorish, Christopher. Sociological and psychological antecedents of evaluation resistance: a case of the data use and disuse phenomenon. Paper presented at American Educational Research Association annual meeting, Toronto, Ontario, Canada, March 1978.

Spivack, G. and Swift, M. The Devereux Elementary School Behavior Rating Scales. Journal of Special Education, 1966, 1, 71-90.

Spivack, G. and Swift, M. Devereux Elementary School Behavior Rating Scale Manual. Devon, Pa., The Devereux Foundation, 1967.

Spivack, G. and Swift, M. The classroom behavior of children: a critical review of teacher-administered rating scales. Journal of Special Education, 1973, 7, 55-89.

Tyler, Ralph. Basic principles of curriculum and instruction. Chicago: University of Chicago Press, 1947.